11-3-1842

On Recent Improvements in Surgery. An Introductory Lecture to the Course on the Principles and Practice of Surgery, in Jefferson Medical College of Philadelphia. Delivered November 3, 1842.

Thomas Dent Mutter, MD

Mutter

ON

RECENT IMPROVEMENTS IN SURGERY.

AN

INTRODUCTORY LECTURE

TO THE COURSE ON THE

PRINCIPLES AND PRACTICE OF SURGERY,

IN

JEFFERSON MEDICAL COLLEGE

OF PHILADELPHIA.

DELIVERED NOVEMBER 3, 1842.

BY THOMAS D. MÜTTER, M. D.

PUBLISHED BY THE CLASS.

PHILADELPHIA:
Merrihew & Thompson, Printers,
No. 7 Carter's Alley.

.....

1842.

CORRESPONDENCE.

Philadelphia, Nov. 10, 1842.

Dear Sir,—At a meeting of the Class of Jefferson Medical College, held on Monday the 7th instant, Thomas K. Price, of Virginia, having been called to the chair, it was resolved, unanimously, to publish your very able and eloquent Introductory Lecture to the present Class. The undersigned being appointed a Committee to solicit a copy, do earnestly add their wishes to those of the Class, that you will comply with their request, which will ever be appreciated by them, and by us individually, as a source of the most grateful remembrance.

We have the honor to subscribe ourselves,

Your most obedient servants,

Thomas K. Price, of Va.
J. D. Robison, Ohio.
Lewis Paullin, Florida.
Charles A. Phelps, Mass.
T. Dupuy Montegrier, France.
E. C. Chew, N. J.
William W. Watts, N. C.
F. L. Parham, S. C.
James T. Gee, Ala.
J. F. Phileas Proulx, L. C.
J. Curtis, Conn.
J. B. Masser, Penn.
A. McFarland, N. H.
Frederick A. Rees, England.
William T. Core, Va.
Joseph H. Day, Ky.
A. A. J. Riddle, Ga.
R. N. Wright, Md.
M. Howard, Cuba.
Aaron Young, Jr., Me.
Jno. J. Bacon, N. Y.
T. H. Payne, Miss.
Geo. W. Ewell, Tenn.
J. Von Britton, St. Thomas.
J. C. Neves, Montevideo.

To Professor Mütter.

Philadelphia, Nov. 12, 1842.

GENTLEMEN,—Your note requesting a copy of my Introductory Lecture for publication, has just been received, and it will afford me pleasure to comply with the wishes of the Class. Be pleased to accept my thanks for the flattering manner in which you have conveyed the sentiments of those whom you represent, and believe me to be

Very truly yours,

THOS. D. MÜTTER.

To Messrs. Thomas K. Price, &c. &c. Committee.

INTRODUCTORY LECTURE.

Gentlemen,—Most of those whom I have the honour to address, are destined to become physicians and surgeons. Not a few, I trust, will add to the renown of an art, the noblest of all, the first and last and only object of which is the alleviation of human suffering.

In the selection of a theme, for the usual initiatory lecture, I have been not a little animated by a desire to foster in you an interest in the science of your adoption, and have therefore, chosen as a subject fraught with lessons of industry, patience, and laudable ambition, while, at the same time it is highly interesting, "a restrospective view of surgery for the last few years!"

This has been called the "age of progression,"—the "age of advancement,"—and our profession, gentlemen, has partaken of the general excitement. It may with truth be said, that of late it has exhibited much of the "freshness and vigour of youth," and none can urge now as in former times, that we continue in a state of comparative apathy, and content ourselves with servilely following the dictates of our predecessors. A contrary disposition, indeed, seems to prevail, we are too anxious to be known as *active men*, and hence crude theories, senseless innovations, and not seldom injurious practical measures, have been crowded into the science. But it is a surprising as well as humiliating reflection, that even with all this energy and vigour, with all the lights of modern science to guide us, with all the accumulated facts, *false* as well as true, of the crowd of labourers in the field, there should exist such diversity of opinion on subjects of the most constant observation. No operation, no theoretical opinion, no mode of practice is broached, but there at once springs up a controversy attended, too often, with an acrimony and harshness disgraceful to all concerned. And

whence does this obscurity arise? It may be traced, gentlemen, to our eagerness to become known as *discoverers*, as the inventors of something *new*, as the great *lights* of the age; in consequence of which we leap to conclusions, ere the facts upon which these conclusions are based have been properly investigated. We have, in truth,

"Rested contented in ideal knowledge;"

we have received as perfect, theories idle as day-dreams, and the foundations of our art must crumble to the earth, unless we learn more discretion and better judgment in the selection of the materials of which they are to be constructed.

No theme could afford a more striking illustration of the correctness of the opinion just advanced than the one selected for this evening's discourse. The numerous operations to be discussed have been as indiscreetly puffed and eulogised, as they have been injudiciously and hastily condemned; and nothing short of patient and unprejudiced investigation, aided by experience and reason, can enable us to place them in their true light. It becomes, then, a task of no ordinary difficulty, to exhibit to you such an exposition of these mooted points as will satisfy all; indeed, I shall not attempt it; my aim being rather to excite in you a spirit of correct, thorough, and truthful investigation, than to establish the the limits of questions still demanding great additional labour for their perfect elucidation. But notwithstanding this to a certain extent erroneous course pursued by our "authorities," no one, not even the veriest stickler for ancient wisdom and modern degeneracy, would hesitate to declare, that the present era of our profession is far in advance of any other that has preceded it; that our science is in reality progressive. Originating unquestionably in the necessities of a race whose progenitors by the infraction of a divine law

"Brought death into the world
And all our wo,"

it has gradually, as crime and luxury have increased these necessities, emerged from the condition of a mean and lowly

avocation, until at length, with all its defects, it stands forth like the "pillar of light," a sure beacon of protection and succour to the wayworn and almost world-weary victim of disease.

From the brief period allotted to this address, it will be necessary to omit many subjects, to allude very briefly to others, and to speak in very general terms of those that I shall bring before you. I shall endeavour, however, to discuss those operations and measures in which American as well as European surgeons have been actively engaged, and which are considered of most interest to the profession.

Before entering upon the discussion of the new operations, allow me to detain you for a few moments only with the bare mention of the great and almost inestimable benefits conferred upon the profession by the labours of Morgan, Palmer, McCartney, Allison, Alcock, Liston, Gulliver, Brodie, Sanson, Dupuytren, Ricord and Rasori, in the department of "Internal Surgery," or what we usually designate as the "Principles of Surgery."

Although the office of inflammation as a therapeutic agent has long been recognised, yet are we chiefly indebted for clear and definite views upon this subject to these modern authorities, and to none more than to McCartney.

To these same individuals do we owe much practical information on the primary treatment of injuries, and many a poor creature is now saved in limb, as well as life, by prompt action and simple and rational treatment, who but a few years since would in all probability have lost both. The excellent papers of Sir Rutherford Alcock on "injuries of the head," "severe injuries of the joints," and "gunshot wounds," deserve all commendation, and while they have conferred lasting reputation upon their author, have also contributed much to the alleviation of human suffering and the preservation of human life. A great improvement has also taken place in the dressing of wounds. That filthy abomination in surgery, a poultice, is now restricted in its application to a few diseases, and is gradually giving place

to the mild, cleanly, and simple warm water dressing! Union by suppuration, or what Mr. Hunter called "union by the second intention," is now almost universally avoided, and all wounds, however extensive they may be, provided no indication exists for the promotion of suppuration, are made to unite if possible by simple adhesion, or by the effusion of lymph, called by Hunter "union by the first intention," and by McCartney "mediate by lymph or blood." To accomplish this mode of union, rest, simple and light dressings, or the *irrigating* treatment with cold water, a measure revived by McCartney and others, will be required.

Diseases of the arterial and venous systems have of late attracted much attention, and it is with pride that I refer to the efforts of American surgeons in this most important class of lesions; while very little has been added to our general knowledge upon the subject, much has been done to simplify details, point out fit cases for our efforts at relief, warn us against dangers hitherto but little understood, and demonstrate the propriety of operations once considered almost necessarily fatal. Porter of Dublin, Morrison of Havana, Parker of England, Thurmon, Ducol, and Deguise of France, Chelius of Germany, Mott, Stevens, Nathan Smith, Randolph, Barton, Peace, Power, and others among us, have contributed much interesting and highly practical information in this department. The recent brilliant and eminently successful operation for femoral aneurism in which the *common* iliac was tied by my friend Dr. E. Peace, of this city, is worthy of all praise, and reflects the highest honour upon our science, as well as upon the operator himself.

In the arrestation of hemorrhage from *small* vessels, *torsion* is gradually taking the place of the ligature, by which means we get rid of a foreign body often productive of much irritation. In wounds of large vessels, however, the ligature, as the safest agent of the two, is always to be preferred. A new operation for the ligature of arteries has recently been proposed by Tavignot, and is called by him the "subcutaneous ligature," from the fact that the integuments are barely punc-

tured, and the ligature passed beneath the skin. It is however a useless, uncertain, and moreover hazardous measure, inasmuch as the surrounding parts being included in the loop of the ligature, the artery cannot be properly divided.

This being the age of experiment, a M. Sarra has attempted to arrest arterial hemorrhage by the introduction into the vessel, of a piece of wax bougie, or some "solid plug,"(!) by which its calibre may be obliterated. I need hardly say that this operation is indicative of the grossest ignorance on the part of its proposer, and can never be performed by any one deserving the title of surgeon.

Much of the dread, once existing, relative to the ligature of veins has subsided, and several excellent operations, especially those on varicose veins, have originated in the knowledge that the vessel may in most cases be tied with impunity.

It is the boast of modern surgeons, and well may we boast, gentlemen, that a resort to painful and mutilating operations is now much less frequent than formerly. In other words, diseases considered but a few years since as invariably indicating a resort to the knife, are now readily cured by constitutional treatment alone. The white swellings, the scrofulous diseases of the bones, the enlargement of the glands, dependent upon the same cause, and many other similar affections are now almost as readily managed as a common inflammation of the same organs originating in another influence. A few years since, before the discovery of iodine and its preparations, either incurable deformity, permanent maiming by the knife of the surgeon, or the quiet of the grave, was the inevitable fate of the unfortunate victim of its selection. That most terrible of all scourges with which a wise Providence punishes the crime of adultery, has after the lapse of centuries had its laws and phases so simplified and freed from obscurity, that all who will take the trouble to learn may render themselves qualified to master its attacks, and thus prove of incalculable benefit to many an erring though often repentant fellow creature. To Ricord, of Paris, a gentleman who although a citizen of the old world

does not forget that to the new he owes his birth, and who by his labours is reaping a golden harvest of riches and honor, is chiefly due the credit of this great work. It is a matter of no small pride, however, that we are able to state, that many of his views relative to the treatment of primary symptoms, were long since taught by Dr. Thomas Harris of this city, a gentleman who adorns our profession by his talent and honourable deportment, and whose speedy restoration to health and usefulness is ardently desired by us all.

Among the recent improvements in surgical pathology, none are more deserving our attention, than the numerous communications on the subject of tumours. Although all confess the crude and unfinished condition in which this department of our science still remains, we must at the same time acknowledge that a great deal has been done to elucidate and render more certain, our views on its most important features. The splendid results obtained by Müller, Laugenbeck, Schwann, and Valentin, through the agency of the microscope, have opened a new field of investigation, besides throwing a flood of light upon a subject hitherto the most obscure. Brodie, Carswell, Hawkins, Cushing, Liston, Syme, and Warren, have also "done good service" in this branch of surgical pathology. I should be wanting in true American feeling, did I pass over without further comment, the work of Professor Warren of Boston. In this book, replete with lessons of sound reasoning and excellent judgment, we find details of operations the most terrific and yet resulting in the happiest manner; and as we read them our conviction is strengthened that for their execution, the most daring courage, intrepid coolness, rigid anatomical knowledge, and practical experience, were all required. Let us then, as fellow countrymen of one who has shed lustre upon our land as well as upon our science, claim for Professor Warren what he so richly deserves, the gratitude and thanks of the whole profession.

I wish to impress upon you, however, the fact, that the

subject of tumours their origin, growth, form, texture, and tendency, is still a rich field for investigation, and promises an abundant harvest for those who will cultivate it with industry and zeal.

Much has of late been said about extirpating the thyroid gland in cases of bronchocele. Without stopping to argue the question, I may remark, that it appears to me wholly improper to subject a patient to the dangers of this operation when the disease is nothing more than an inconvenience; where the tumour degenerates or interferes with the trachea or great blood vessels of the neck, and thus places the life of the patient in jeopardy an operation is justifiable, but under no other circumstances.

An interesting fact not generally known, and one first pointed out, I believe, by Dr. Thomas Harris of this city, is also a strong objection to the performance of this operation. According to his observation, if we examine the cases of goitre originating in districts to which the complaint is not endemic, we shall generally find the heart and large blood vessels more or less diseased and the general health of the patient proportionally depraved. My own experience quadrates with his. This fact strongly militates against an operation, as well as against the indiscriminate employment of iodine, the usual remedy in such cases, and sustains to a certain extent the notion that the thyroid gland is a diverticulum to the heart.

Cancer, in all its phases, has also been closely investigated by Müller, Laugenbeck, Carmichael and others, but I fear much remains to be done ere we arrive at its true origin and proper treatment. No question seems to exist as to our power of communicating the disease by inoculation. If, for example, we mix a little cancerous matter with water and inject the mixture into the venous circulation of any animal, we to a certainty induce cancerous deposites in different parts of the body, and especially in the pulmonary veins.

Among the new methods of cure, those of Jobert, Lisfranc and Phillips, of Liege, have attracted much attention.

Jobert's plan consists in the application of a ligature to all the principal arteries supplying the tumour, and the division of its nervous filaments. According to him, by this process he has succeeded in curing four cases of cancer of the lip, and one of the tongue. For myself, I can say nothing about the merits of the practice from any personal experience, but entertaining the views which I do on the subject of cancer, I must say that where any operation is proper, a circumstance very rare indeed, complete excision of the tumour is much to be preferred to any other mode of treatment.

Lisfranc, in cases of superficial cancer, proposes to cure it by merely removing the *diseased tissue* either with the ligature or knife, leaving the organ upon which it happens to be located untouched. When the disease penetrates, or deeply involves an organ, he recommends excision of the tumor, along with a certain portion of sound tissue.

A most valuable operation, in certain forms of cancer, has recently been proposed by Mon. Charles Phillips, of Liege, and a repetition of his practice in my hands at least, has been productive of the most satisfactory results. You all know how difficult it is to heal, permanently, what is called a "cancerous ulcer," or the wound which results from the excision of a cancerous tumour, and also that even where the disease has been entirely removed, and the parts have cicatrized, it is exceedingly prone to return in the cicatrix. This constant disposition to reappear has been attributed to a constitutional taint and such is the fact in many cases, but there are others in which the disease presents a strictly local character, and yet the relapse takes place. With our present knowledge on the subject, it is utterly impossible to explain this circumstance. It is, moreover, well ascertained that the predisposition to return is very much modified by the mode of union adopted by the surgeon in the healing of the wound. Dieffenbach was

probably the first to direct our attention to the fact, but to Phillips is due the merit of having by positive experiment, shown the correctness of the views of this great surgeon. It appears that when the wound unites by *granulation*, there is much greater danger of a return of the disease, than where union by the *first intention* is adopted. To insure the occurrence of the latter process, Dieffenbach proposed, and Phillips carried into execution, the following plan. After the removal of a cancerous tumor, instead of allowing the parts to heal by the "second intention," or to be covered in by the simple approximation of the edges of the wound, a plan which in large operations is always accompanied by a straining and unnecessary as well as injurious tension of the flaps, he takes a piece of sound skin from the vicinity, and either by adopting the "sliding process," or, where this is impossible, partial *torsion* of the pedicle, covers in the wound completely. Union by adhesion usually takes place, and the return of the disease is in most cases effectually prevented. How it is that the application of healthy tissue to that hitherto more or less diseased, so modifies the action in the latter as to render it normal, we cannot say. By some it is attributed to a change in the condition of the fluids of the part, healthy blood, for example, being mixed with that previously diseased;—this, however, is mere theory, and we must rest content with the fact, for fact it is, that "the application of a healthy tissue to one hitherto diseased, is often, although not uniformly, sufficient to render the latter perfectly sound."

This doctrine seems to have been well understood by Martinet de la Creuse, who published a paper on plastic surgery in the Gazette Médicale for 1835. But he committed a great error in its practical application, for instead of attempting union by adhesion at once, he allowed the surface from which the cancer was removed to granulate freely, which usually required six or eight days, before he applied the flap of sound skin. He thus lost time, and sub-

jected his case to all the risks of "union by granulation." (See, Autoplastie apres L'Amputation des Cancers, par Ch. Phillips, de Liege. Bruselles, 1839.

A very interesting paper on "painful tumors of the female urethra," has been published in the New York Medical Journal, by Dr. A. Hosack, and to this source I would refer all who desire information upon a subject hitherto but little understood.

On the subject of fractures, a good deal has been written during the last few years, but I regret that of this immense mass of what has been called correct knowledge, very little indeed deserves our attention or adds much to our practical information upon this highly important lesion.

Professor Syme and Mr. Meade have detailed some interesting experiments in proof of the power of the periosteum to form bone, and have established the fact so clearly laid down by Sir C. Bell, and generally acknowledged by all, that this membrane though not essential to the formation of callus, is nevertheless a very useful agent in the process. Müller having recently asserted that the periosteum was not at all concerned in the re-union of bone, these experiments were performed with a view to test the correctness of his opinion, and clearly prove that for once, at least this great authority is in error. The fact is, both bone and periosteum, and also the adjacent soft parts, unite in the formation of callus, while either can accomplish the task without the aid of the other.

Some interesting, as well as very important details in the statistics of fractures, have been published by Lawrie, Heyward, Norris, and others.

In their treatment we find, as hitherto, great diversity of opinion. I shall not of course, enter into an enumeration of all that has been said, or attempt to explain the different *new dressings*, as they are called, but I cannot refrain from directing your attention, especially, to a mode of treatment as unphilosophical as it is—as usually employed—danger-

ous and unsuccessful; I allude to the *immovable apparatus*, or *starch bandage*. The origin of this dressing, so far from being recent, may be traced almost back to the time of Hippocrates, yet it is usually spoken of as a *modern invention*, from the fact of its having been revived and perfected by a few of our contemporaries. To Suetin, Louis, and Velpeau may be attributed the repute in which, for a year or two past, this measure has been held; and a few of our own surgeons have adopted their views upon the subject. Without stopping to argue the point, it seems very clear that to apply an *immovable* and *inelastic* dressing to a part constantly undergoing a change in size, from the shrinking of the tissues consequent to rest and peculiar position, with the view of keeping this part perfectly steady and quiet, is unphilosophical; its danger and want of success the records of our courts are constantly proving. Within the last six months I myself have been summoned to give testimony in three suits brought against medical men who had used this apparatus, and whose patients either lost the limb entirely, or were cripples for life. It may be said, perhaps, that these cases are examples of the *abuse* of this dressing, and not of its proper application; but surely the argument will not hold, when we find that the gentlemen engaged are men of years and standing, and one a Professor of Surgery. While, then, I acknowledge that high authority sanctions the use of the immovable dressing, I cannot, so far as my own experience and that of most of the surgeons in Philadelphia goes, give it my approval; and whenever employed we should constantly bear in mind its dangers.

A question of much practical importance in the pathology of fractures of the cervix femoris within the capsule, seems at length to be set at rest by the observations of Dupuytren, Velpeau, Amesbury, Adams of Dublin, and others, and by certain specimens in the cabinet of Professor Warren, of Boston. Can such a fracture unite by bone? has long been a mooted question, and has given rise to as much bitter controversy as almost any other subject in surgery.

We can I think with safety assert, that although very rare, especially in old persons, such an occurrence may undoubtedly take place. Bearing this fact in mind, our treatment must be modified to ensure if possible this truly fortunate result.

I should be wanting in respect to the memory of that great surgeon, and most excellent man, Sir Astley Cooper, did I pass over without mention his recent valuable contributions to the subjects of fracture and dislocation, just published by his nephew, Sir Bransby Cooper. To this work, gentlemen, I refer you, as a sound and most trustworthy guide in practice.

It is with much pleasure that I direct your attention to a late publication on the "Deformities resulting from badly treated Fractures," by my friend, Dr. George W. Norris of this city. Like every thing else emanating from this source, it exhibits ample evidence of deep research, impartial examination, lucid deduction, and rigid truth, and contains all the information on the subject up to the present date.

Another most distressing result of fractures, "artificial or false joint," has likewise been investigated by the same gentleman, and also by Dr. Hartshorne, jr. of this city, who by his industry and talent is proving himself a worthy son of a most honorable and distinguished father.

A most useful remedy, in the shape of tenotomy or myotomy, as the case may be, has recently been introduced by Dieffenbach in the treatment of old fractures, especially those of the patella and olecranon, where the fragments are separated to some extent. Time will permit me to do no more than barely allude to the operation.

In these cases the tendon or muscle is divided above the superior fragment, which is then brought down as nearly as possible in contact with the lower, and there retained by an appropriate bandage. Sometimes it is necessary to divide the tendon attached to the lower fragment in fractures of the patella, before the requisite approximation can be obtained. This approximation, too, has often to be made by degrees,

the fragments being daily drawn towards each other, and when they are nearly in contact they should be frequently moved, and if possible rubbed against each other, so as to excite an ossific deposit in the space by which they are separated. This beautiful expedient, the principle of which is so obvious, has frequently produced the most decided benefit, while in other instances it has failed. It is, however, a simple, as well as safe operation, and where the usefulness of a member has been to a certain extent lost by the extensive separation of the fragments of a broken bone, we should not hesitate to advise its performance. Like all similar operations, the pain, hæmorrhage, and subsequent irritation are comparatively slight.

In the treatment of dislocations but little novel or useful matter has been introduced, if we except the method employed by Dieffenbach in the management of those of long standing. By the application of the Stromeyrian operation, he succeeded in reducing a dislocation of the humerus of two years standing. In this case he divided the tendons of the "pectoralis major, the teres major, and latissimus dorsi, and afterwards the bands of fascia, by which the bone was held in its abnormal position ; the bone then went into its place with little difficulty.—(British and Foreign Review, 1839.)

In the present state of our knowledge it would be unsafe to hazard an opinion as to the practical utility of this operation. Cases, and well substantiated results are still wanting, to enable us to say whether it is in reality an *improvement*, or merely an *innovation*. At first sight it seems contrary to our present views of the injury, to suppose that either the head of the bone or the cavity to which it naturally belongs, should notwithstanding the lapse of two years preserve their surfaces in such a state of perfectness as to render them suited to each other when brought into contact. We know very well that this is not usually the case. All unreduced luxations of long standing prove, that not only the head of

the bone, but also its articular cavity undergo changes by which they are rendered totally unfit for each other. And not only is this the case, but nature has endeavoured to supply the loss of the original joint by the establishment of a new one, in many cases almost as useful as the first.

Before resorting to the section of the muscles, then, we should always assure ourselves that these changes have not taken place to an extent forbidding the proper apposition of the bones ; and also, that nature is not disposed to make any compensation for the loss of the joint by the formation of a new one. That tenotomy has been of service in certain cases of luxation, there cannot be a doubt, and hence the measure deserves our attention ; but let me caution you against an undue and hasty resort to an operation by which your patient may be subjected to much present pain, and probable future injury.

During the last few years, the attention of the profession has been directed towards a subject of much interest and obscurity ; I mean "Congenital Luxations." To Dupuytren, Gerdy, Bouvier, Pravas, Guerin, Dieffenbach, Stromeyer, Adams, and Smith of England, we are indebted for the best information relative to the pathology and treatment of the defect. Much yet remains to be done, however, ere all the difficulties surrounding it are removed ; and I trust that some of you who have time and inclination will for the honour of American surgery, investigate the subject.

Closely connected with the subjects just referred to, are the various affections of the joints, and no class of surgical diseases has been more carefully and profitably investigated. Many terrible maladies and shocking deformities of this portion of our frame, which, but a few years since were considered either as incurable, or necessarily fatal, are now in consequence of our better knowledge rendered as tractable as almost any other affection to which we are liable. That terrible disease of the hip-joint, coxalgia, is now, even after the

second stage or that of shortening of the limb has existed for some time, often curable without the least deformity by the application of gradual extension to the shortened limb until it attains its proper length. I wish that I could claim for one of our own countrymen the merit of this novel and most useful method of treatment, the details of which I cannot now enter upon; but to Humbert, a German, is due nearly all that we know upon this subject. My friend, Dr. Wm. Harris, of this city, had treated a case by the same plan before those of Humbert were published, and he is therefore entitled to almost equal credit with the surgeon whose name has been appended to the method—(See Med. Examiner, 1839). In my own practice the success of the new plan has been witnessed by several of my class, and I have now the cases of seven individuals, perfectly cured, who under the usual treatment must have remained cripples for life. To be useful the extending effort must be employed in a few weeks after the shortening has taken place, for if longer delayed the adhesions are so firm that to break them up a force much greater than the individual could bear has to be exerted. There is also some danger of exciting anew inflammatory action, and by this means bringing on a relapse. While, then, I advise you to pursue the practice of Humbert, I wish at the same time to caution you against its improper or injudicious employment.

Another great improvement in the treatment of diseased joints, first recommended by White and Moreau, but never very generally employed until recently, is the excision of the diseased part, instead of taking off the entire limb. Syme, Liston, Key, and Velpeau, of Europe ; Dr. Thos. Harris, Dr. Buck, of New York, my colleague, Dr. Pancoast, and some others in this country, have probably performed the operation as frequently as any other surgeons.

A new, most unphilosophical, and most dangerous treatment in true anchylosis, has of late been recommended by Louvrier of Paris. The object of M. Louvrier's operation is by the aid of powerful machinery to extend the anchylosed

joint, "disregarding entirely all impediments, and the nature of those impediments!" The resistance must be overcome; and to accomplish this but a few moments are necessary. I need hardly caution you against a means which has not even the merit of partial success to sustain it, and which is so obviously dangerous. It is looked upon, I believe, by nearly all the surgeons of Paris as an arrant piece of quackery; and by a recent report of the committee appointed by the "academy," unfavourable to its merits, it will probably be speedily consigned to "the tomb of all the capulets!"

In striking contrast to this operation of Louvrier, are those for the same affection introduced by my friend Dr. J. Rhea Barton of this city: I do not hesitate to assert that the age has given birth to nothing more brilliant, more profoundly philosophical, more eminently useful, or better calculated to shed lustre upon our science. They are besides American inventions, acknowledged to be such, and have contributed not a little to elevate us as a body in the eyes of all Europe. To the distinguished individual who has thus while conferring a benefit upon society richly endowed the profession of his choice, I offer that which I know his feeling heart will most truly prize, the thanks and blessings of the human race.

Connected with this subject is the new treatment for false anchylosis. This plan consists in the gradual application, by an appropriate machine, of a force calculated to separate the contracted members from each other, and the facility with which we cure deformities, but a few years since considered utterly beyond the reach of surgery, is really astonishing.

The practice originated with Stromeyer, whose screw, which I show you, is the instrument almost universally employed. Markham, in his paper on the surgical practice of Paris, tells us that Lisfranc and Blandin, as well as other surgeons, have employed this measure for several years. In this country it has been extensively employed by Dr. Detmold of New York, Dr. Chase of this city, by myself,

and I suppose ere this by almost all the surgeons in the country, and I cannot too strongly recommend it to your attention.

Goyraud of Aix, and Syme, have performed a very ingenious operation for the removal of cartilages or foreign bodies from the joints. "It consists in making the substance to be removed prominent, and then in passing a narrow knife through the skin at some distance from the joints, and through all the intermediate tissues down to the foreign body. Without enlarging the opening in the skin, the synovial membrane and adjacent tissues over the loose substance are now to be freely divided, till, by pressure on the latter, it slips out of the joint through the wound, and lodges itself in the subcutaneous cellular tissue, or in some of the other tissues between the skin and the joint. After this, the patient must remain at rest for several days, (the small external aperture being merely covered by adhesive-plaster,) till all chance of the occurrence of inflammation has disappeared. The foreign body dislodged from the interior of the joint, will form a cyst for itself, and remain in its new position without producing any annoyance; but if it be deemed necessary, it may easily be removed by a simple incision through the skin over it, which will no longer be likely to excite any inflammation of the joint itself!"

Recollecting that the usual operation for this disease is often followed by the most serious results, the method of Goyraud and Syme is certainly deserving our attention.

An interesting operation, for the relief of chronic hydrocephalus, has recently been performed by Dr. Conquest, of England. This disease had proved so fatal in the hands of almost every one that the profession hailed with pleasure the advent of a measure purporting to accomplish so much towards its cure. I regret, however, that although successful in several instances, the operation of tapping the head seems to be attended with much hazard, and in congenital cases even Dr. Conquest himself tells us that it is productive of merely palliative results. That it does oc-

casionally prove useful is shown by the number of cures which it is reported to have accomplished, in the hands of Conquest, Graëfe, Symthe, and others; and also by the manifest relief it affords in cases of extensive effusions as shown by the cessation of convulsion; the disappearance of stupor and drowsiness; the return of sensibility, and voluntary motility, where these functions had ceased to exist; and by a restoration, either partial or complete, of the mental faculties. The principal ill consequences supposed to attend its performance are inflammation of the substance of the brain or its membranes, and cerebral collapse. Both of these results are grave objections to its general practice, and although the first may be guarded against, by proper antiphlogistic measures, and the second by the gradual abstraction of the fluid, and subsequent compression of the head with a roller; yet I deem it safest to advise you to resort to all other remedies ere the operation in question be put into execution. When all else fails, it should be performed as a palliative measure, just as tapping in chronic dropsies in the other cavities, is employed to afford relief.

As the hazard of this measure is conceded by all, many are disposed to substitute for it the plan of Barnard, which consists in the steady and long continued application of *pressure.* This treatment is unquestionably useful, but should not, I think, be exclusively employed.

In the British and Foreign Medical Review, and in the Gazette Medicale, for 1841, you will find a new operation for the radical cure of *spina bifida*, proposed by Dubourg. He cuts out the sac, and then unites the edges of the wound by the twisted suture, and in the two cases reported the operation was followed by a successful result. More extensive experience is required to enable us to say whether the measure is in reality one of much utility.

Modern surgery has done much for the relief of the terrible diseases of the maxillary bones, and although the extirpation of either of them seems an operation too hazardous

to be undertaken, we yet find that many cases are recorded in which it has been performed with the most decided success.

Numerous attempts have recently been made to cure hernia radically, by other measures then the truss. My friend Dr. Pancoast has injected the sac with tinct. of iodine, as we do in hydrocele, with the view of causing its obliteration. Dr. Haller proposes the insertion of a portion of the integument covering the hernial tumour, (after the reduction of the protrusion,) into the inguinal canal as first recommended by Jobert, but in addition to this a certain degree of pressure is exerted, by means of a hard pledget of lint carried up the canal, and there retained by a double ligature. (British and Foreign Review, 1842.)

Partial or complete success, according to their authors, has attended all these measures ; but they are as yet open questions, and cannot be considered as entitled to rank among the established operations in surgery.

In these days of subcutaneous operations, it has been proposed to divide the stricture in strangulated hernia by this process. No surgeon accustomed to operate for this disease, will probably ever adopt a measure which effectually prevents his ascertaining the condition of the viscus he returns to the cavity of the abdomen, and which in its execution obviously entails more hazard than the usual operation.

I cannot refrain from calling your attention to a novel and most hazardous, yet, in some cases, successful operation performed, a short time since, by Amussat of Paris. When, from any cause—such, for example, as tumours, cancerous ulcerations, or the lodgement of foreign bodies in the rectum—this passage is completely and permanently obstructed, he recommends the establishment of an *artificial anus*, in the lumbar region. The same plan may be resorted to in cases of imperforate anus, where the ordinary operation for this defect cannot afford relief.

Amussat, also deserves credit for another most ingenious

operation in certain varieties of imperforate anus. In a case of this kind, where the rectum was deficient for two inches from the perineum, he cut through the barrier, passed his finger between the vagina and sacrum, until he reached the pouch of the rectum distended with fœces, drew this down, and attached it by suture to the anal opening which he had made in the perineum, having previously opened the pouch that the stitches might be more readily passed, and the fœces easily evacuated. The success was complete, and no operation of modern times is more deserving your admiration, as well as imitation under similar circumstances.

The danger, suffering, and frequent want of success attendant upon all mechanical methods of removing stone from the bladder, have induced several modern surgeons to reconsider the question of medical treatment by solution. The waters of Vichy, those of Recoaro, the various alkaline waters of England and this country, the administration of weak acids by the stomach in cases of alkaline calculus, and of alkalies in acid stone, and even the injection into the bladder of dilute acids, have all been recently recommended; but there are few instances in which the temporary relief that they sometimes afford, has been followed by a permanent cure. That the pain usually accompanying stone in the urinary passages has been relieved for a time, and the formation of calculus matter checked, by a judicious administration of these agents, there cannot be a doubt, but that a stone once formed has been *dissolved* through their exhibition, I do not believe. The cause of relief has been variously explained. Some, as Leroy d'Etoilles, account for it by supposing that the feeble solvent dissolves the outer laminæ of the stone, and is then checked in its action by the layer of animal matter which is found between all the concentric laminæ of a calculus. This layer of animal matter being less irritating than the hard, rough, stony one, the sufferings

of the patient are diminished, and he fancies himself perfectly cured.

Others suppose, that by changing the characters of the urine, we render it less irritating. The mucous coat of the bladder —for example—being intolerant of an alkaline fluid, may possibly bear with perfect comfort the presence of an acid one, and vice versa. In alkaline stones, therefore, give acids; in acid ones give alkalies.

Others attribute the benefit to the influence these agents exert in strengthening the whole system, especially the stomach and bowels, in consequence of which every organ performs its function correctly, and there is no secretion of sabulous matter.

Whatever explanation you adopt, recollect that in the use of these remedies, especially the strong alkalies, we may do a great deal of mischief by producing diseases of the stomach and bowels, and even of the urinary passages themselves.

It is impossible for me to enter upon the discussion of the merits of the different new operations invented for the removal of stone from the bladder. Many excellent surgeons decry the crushing and grinding processes, while others of equal weight contend that they are admirably adapted to almost all cases. It may with truth be said, I think, that lithontripsy, which has gradually taken the place of lithotrity, is an operation of the greatest value, and richly deserves being classed among the modern improvements in surgery; and, gentlemen, the establishment of its utility in this country, at least, is due to Dr. J. Randolph of this city, a surgeon who deservedly ranks among the first of the age, and a gentleman whose social virtues have endeared him to a large circle of friends. That the operation cannot supersede the use of the knife all acknowledge, but it is an error to suppose where the case is properly selected, that it is a measure of equal danger and suffering with lithotomy.

Among those who still contend for the supremacy of the knife, is that excellent surgeon, Dr. Dudley, of Lexington,

Kentucky, unquestionably the most successful lithotomist of the age.

While on this subject, it may be well to call your attention to a recent operation by Chavasse, of Birmingham.—To remove a calculus from the female bladder, he passed the "bistouriè cachée" along the meatus urinarius, and in withdrawing it, "cut the mucous membrane of the passage through its length and depth, leaving the other textures entire"! He then introduced a dilator and distended the passage so that the calculus could be removed with the forceps. The usual distressing result after other operations—incontinence of urine—did not take place.

A new method of treatment in seminal weakness and the effects of this most terrible complaint, has recently been introduced by Lallemand. In many cases, though not in all, the discharge is dependant upon chronic irritation of the neck of the bladder or prostatic portion of the urethra and unless this condition is removed, the disease remains incurable. To accomplish this object Lallemand proposes the application of nit. argent. to the diseased surface, and the modus agendi of this remedy is easily understood. You are well aware that lunar caustic is one of the best sedative applications that can be made to an inflamed mucous membrane and the daily exhibition of this remedy in chronic conjunctivitis, inflammation of the fauces, &c., proves the confidence placed in it by the profession at large. Now it acts in the same way if applied to the urethra.

It is with surprise that I find some excellent surgeons objecting to this operation, on the ground of its hazard. I can only say that if properly employed, nothing is more easy, less painful, less dangerous, or more effectual; and this I believe to be the experience of all who have given it a fair trial.

I cannot say as much for the treatment of stricture of the urethra, recommended by Lallemand and Chretien. This plan called by them "dilatation brusqueé," is nothing more than a modification of the old method by dilatation with bougies;

but the obstruction is removed much more speedily. In the course of thirty-six hours, the whole treatment is completed, by the repeated and frequent introduction of bougies of different sizes. I have attempted in a few cases to overcome the stricture by this plan, but have been obliged to desist in consequence of the pain and inflammation, long before a bougie of a proper size could be introduced.

A very interesting paper on hypospadias and epispadias, has recently been published by Dr. Mettauer of Virginia, a gentleman to whom the profession is indebted for many excellent improvements in surgery. It is too voluminous, however, for me to do more than mention it as a most ingenious and valuable communication.

No affection of the genital organs gives rise to more mental uneasiness and often physical distress or is more frequently mistaken for other diseases, than varicocele. Hence we find surgeons constantly occupied in devising some plan for its relief; a few of the most recent of these curative measures it will be well for you to understand. The most simple, and probably the safest and least painful operation, is that proposed by Velpeau, and does not differ in the slightest degree from the usual operation of this surgeon for varicose veins in any other part of the body. Davat advises that the needle should *transfix* the vein, rather than pass beneath it as proposed by Velpeau; but the latter plan in my opinion is to be preferred. Ricord recommends the *subcutaneous ligature* of the veins by a process which he describes, but as yet the method has been scarcely employed. Breschet strongly recommends compression of the veins by a pair of forceps, the pressure to be kept up until the obliteration of the vessel is complete; but the measure is harsh and not more successful than others of a less painful character. The method of Sir A. Cooper, which consists in cutting out a portion of the scrotum has many advocates, although in my hands, it has generally failed to afford entire relief. The modification of this plan; recently introduced by Dr. N. R. Smith, of Baltimore, is very ingenious and highly creditable to the excellent and justly celebrated surgeon its inventor.

Many patients are exceedingly timid, and will not consent to the performance of any severe operation, and with such I have found acupuncture answer very well. The needle is to be passed every day or two through and through the largest veins, and thus by creating a chronic inflammation, we thicken the coats of the vessel and finally cause its obliteration. It is however, a tedious process, and must be assisted by a suspensory bandage.

No department of surgery has received more attention within the last few years, than that relating to the "Diseases of the Eye." But a short time since, the pathology and practical treatment of many of these affections, were but imperfectly understood; and hence the success of the impudent charlatans many of whom by devoting themselves to this branch of surgery, not only filled their own purses, but did much injury to the profession in general. I cannot attempt here, even a cursory survey of the immense mass of information with which the science has been enriched by the labours of Lawrence, Mackenzie, Middlemore, Franz, Chelius, Eble, Vidal, Velpeau, Roux, Cunier, Rognetta, and others; oculists whose reputations must survive even the withering hand of time. Nor have we been forgetful of our duty in this department of our art. The excellent institution in this city, founded by the late Mr. Wills, and now under the direction of gentlemen who bear the highest reputation as surgeons and physicians, has done much towards attracting the attention of the profession to this class of affections; and while it is the means of dispensing light and almost a new life, to the unfortunate creatures suffering under the loss, either partial or complete, of that sense which has been termed the "joy of man!" it is also adding to the reputation of the science. I cannot refrain from advising all of you having the opportunity to avail yourselves of the excellent lessons there taught, and suggest as aids to their profitable hearing, the excellent work of Dr. Littell, of this city, and the edition of Lawrence, now undergoing revision by a most competent oculist, Dr. Hays. Our brethren in New York and Boston have also

been much occupied with this branch of surgery, and it is with unfeigned pleasure that I mention the names of Stevens, Kearney Rodgers, Delafield, Post, Wilkes, Kissam, and Reynolds of Boston, as oculists deserving all commendation, and who by their labours, have contributed much towards elevating our profession in the eyes of the community at large.

I cannot refrain before leaving this subject, from calling your attention to a few of the novelties in ophthalmic surgery, some of which are highly meritorious and deserve your confidence, while others are but the vagaries of knaves or charlatans, introduced rather to gull the "dear public," than to confer benefit upon their fellow creatures.

Many of you are aware that surgeons for some time past have usually considered a wound of the supra-orbitar nerve one of much importance, under the impression that it almost invariably gave rise to amaurosis. The observations of Constatt, Walther, and others, show conclusively that such is not the case, and when loss of sight follows wounds about the forehead, it is to be attributed "to some simultaneous derangement of the organs contained within the orbit, or the cranium, and not to any direct injury of the frontal nerve!"

Among the numerous remedies recently employed for the cure of different affections of the eyes, myotomy appears to have attracted much attention, and I say with regret, that no measure has been more wantonly put into execution, or been productive of less real benefit. The affections in which it has been chiefly employed are strabismus, already alluded to, myopia, amaurosis, and corneal speck.

Guerin of Paris, was the first to perform the operation for myopia, of which according to him, there are two kinds; "the one mechanical or muscular, the other optic or ocular." The mechanical myopia is the result of "a primitive shortness, or of the active retraction of the muscles of the eye-

ball," especially the recti. To relieve this condition and thus change the axis of vision, he divides one or more of the muscles and according to his statement, with the most decided benefit. Cunier, Kuh, Franz, Phillips, Bonnet and others have adopted his views and practice to a certain extent, and declare that several cases of the defect have been relieved. Phillips and Bonnet state that they have cured myopia by the division of the oblique muscles only, but the correctness of their report is doubted—even by those who advocate the operation under all circumstances.

The "bistoury maniacs," as those who hesitate not to *cut* for almost every known defect of our frames are called by a recent writer, have not in their zeal neglected to try their *luck*, not *skill*, upon persons afflicted with the "drop serene." Believing that certain cases of this disease were dependant upon a spasmodic or irregular-acting condition of one or more of the muscles of the eye-ball, they have divided the muscles supposed to be in fault; and, according to their statements with decided success. I do not like to charge any professional brother with wilful falsehood, but it seems to me incredible that such a condition of the muscles should produce palsy of the retina; or, admitting the possibility of such an influence, that any surgeon should possess tact sufficient to detect the muscle in which the defect resides. I have never performed the operation myself, and unless much stronger arguments than those now adduced in its support are brought forward—never shall.

The same operation (division of the muscles of the eye-ball), has recently been performed by M. Petrequin, Bonnet and others, for what is called Kopyopia, i. e. the disposition to fatigue of vision. The results of the experiment were very satisfactory to the gentlemen who conducted them, but I think it hardly probable notwithstanding all that is said in its favour, that any surgeon who values his reputation will undertake its repetition.

A very ingenious operation in cases of opacity of the cornea, the opacity being so situated as to prevent the

transmission of light through the pupil, has recently been performed by a celebrated Belgian oculist, M. Cunier. The operation consists in displacing the axis of the eye by the section of one or more of the muscles, so as to induce a certain degree of squinting. Suppose, for example, a man has a speck covering the centre of the cornea only, the other portions being transparent; if we divide the internal rectus muscle its antagonist immediately draws the eye out, producing slight divergent strabismus, and placing the transparent portion of the cornea over the pupil, thus enables the individual to distinguish objects. In some cases it is necessary to divide the inferior oblique muscle as well as the rectus, in order to carry the eye outwards to a sufficient degree. Where from the location of the speck, the eye must be turned inwards in order to enable the patient to see, all that we have to do is to divide the external rectus muscle. This ingenious and truly scientific operation demands our respect and admiration, and should always be preferred when practicable, to the doubtful operation for artificial pupil usually performed in these cases.—(Med. Chirurg. Review, Jan. 1842.)

A good deal of interest has recently been excited by the statements of a Mr. Turnbull of London, relative to the use of concentrated prussic acid in the form of vapour, in certain diseases of the eye, and especially amaurosis. I have given the measure a fair trial in thirty-three cases of the latter disease, and with a very discouraging result, only three having been in the slightest degree *benefitted*; in no case was the *cure complete* or *permanent*. In cataract, corneal speck, chronic inflammation of the conjunctiva, and some other affections of the eye in which it is recommended by Mr. Turnbull, its application produced no impression whatever. When applied for a few moments to the organ, it produces rapid dilatation of the pupil, a sensation of warmth in the part, and sometimes nausea and vertigo. As a thereapeutic agent in this class of diseases, (so far as

present observation goes,) it may be considered as altogether useless.

Diseases of the ear have also attracted considerable attention within the last few years, and much useful information relative to their nature and treatment, has been furnished; and Itard, Deleau, Royer, and especially Krahmer, have done a great deal towards clearing away the mist of obscurity in which, for so long a time, this class of diseases was shrouded, but there yet remains much to do ere we can consider the subject as placed upon its proper basis. The popular operation of injecting the eustachian tube, has frequently proved useful, but as a general rule it may be said to fail of affording the relief so readily promised by its authors. The same may be said of the operations performed upon the membrana tympani, in cases of obstruction of the eustachian tube.

I am next to call your attention to a class of operations that for a time were considered almost as fabulous, excited the ridicule of Butler, Voltaire, and the polished Addison, and, even now, notwithstanding the positive testimony of the first authorities in their favor, are supposed by many to be bare assertions, destitute of truth and as useless as they are apocryphal.

I allude to those operations which have for their object the restoration of lost organs or the correction of partial deformities of the same, by the application to the defective part of a piece of integument, so shaped as to resemble after its complete adhesion, more or less perfectly, the organ whose place it is destined to occupy. To these operations various generic terms have been assigned, but that introduced by Zeis seems to meet with most general approbation. By him the art of "restoring lost parts," &c., is called "*plastic surgery*," (from πλασσω, to mould.) Blandin, of Paris, proposes the addition of the adjunct auto (αυτος—self,) to the word plastic, thus making the generic term "*autoplastic*;" but this modification signifying as it does

"an innate power of reproduction in tissues," has been rejected as liable to lead to error. The word *taliacotian*, has also been used as the generic, in honour of an Italian surgeon named Taliacotius, who acquired great celebrity in this department of surgery. Adopting myself the phraseology of Zeis, I include under the expression *plastic surgery*, all the specific terms employed in speaking of each particular modification of the principle; such as rhinoplasty when the nose is made, cheiloplasty when the lips, blepheroplasty when the eye-lids, &c. &c. It is now generally admitted that "plastic surgery" originated in India, in which country the peculiar punishments inflicted on criminals naturally stimulated individuals to the discovery of an art for the practice of which such frequent opportunity was afforded. What the knife of the executioner called forth in India, disease and accident have excited in Europe and America. Although no one loses his nose here by the *law*, he may yet find an executioner of another sort fully competent to the removal of this most becoming part of the face.

It appears that these operations were confined to certain low caste priests who derived their origin from the brahmins, and who carefully concealed their modes of procedure. So careful where they on this point, that it is impossible to say whether the art was known to either the Egyptians, Greeks, or Romans;* it seems indeed to have been confined almost exclusively to its originators, until about the latter part of the sixteenth century, when Taliacotius, a surgeon of Bologna, became notorious by his operations, and also by his dissertation entitled, "*De Chirurgia Curtorum per insitionem.*" After this, one or two isolated cases were reported by Cortesi of Messina, Hildanus, and Molinetti of Venice, but the ridicule heaped upon these operations, which were almost in every case rhino-

* Galen states that the Egyptians understood the art, but that their methods were kept secret, as well as those of the Indians.

plastic, prevented the general introduction into practice of a measure now known to be of the utmost value.

This ridicule was probably engendered by a proposition of Taliacotius which he, however, ultimately abandoned, to make noses from the skins of other people. Some of the anecdotes told are amusing, and at the same time explain the cause of these operations having for so long a time been disregarded. Van Helmont relates the case of a man for whom Taliacotius had made a nose, by "transplanting the skin from the arm of a porter on to the noseless face of his patient. All went well for the space of thirteen months, but at the end of that period the borrowed organ gradually lost its temperature, and in a few days became gangrenous; upon inquiring, it was found that at the self same period the original owner of the nose had died"! To this fiction is probably due the celebrated lines in Hudibras, Butler taking the liberty, however, of giving the new organ "a local habitation," different from that assigned by our author.

The sympathy between the nose and its parent, was indeed most extraordinary. Not only did the former die with the latter, but during life it was effected by the pains of the original proprietor. We are told says a writer of "three Spaniards, whose noses were all cut from the same porter, who finding them one day shoot and swell extremely, sent at once to know how the porter was; they were told that the day before he had been severely kicked, and that he was in bed in consequence of his bruises. This was highly resented by the owners of the noses, who considered the indignity as offered to themselves." He goes on to remark, "that in this and several other cases, it may be said the porter led the gentlemen by the nose!" In consequence chiefly of this ridicule, no attempt to perform these operations was made after this period until the latter end of the last century, when several criminals in Madras who had lost their noses were operated on with such success by a native surgeon, that Linn and Carpue of London, determined to carry the plan

into execution; Linn's case failed, but the two operated on by Mr. Carpue were so much benefitted, that an impetus was given to the science which has gradually been increasing up to the present day in Europe, as well as in this country. But even now *plastic surgery* must be considered in its infancy, for although much has been done much remains to do, in order that the true value of the principle may be fully established.

To Graefe, Dieffenbach, Zeis, Fricke, Chelius, Dalpech, Blandin, Dupuytren, Velpeau, Roux, Lisfranc, Labat, and Jobert, on the continent of Europe, and to Liston and a few others in England, are we indebted for much highly interesting as well as practical information, and to these authorities is due the credit of having fixed upon an imperishable basis an art nearly lost, yet of the greatest value to mankind. My friend Dr. J. M. Warren of Boston, was probably the first to introduce the successful application of plastic surgery in the United States; I believe I may claim the merit of having perhaps added something to the same subject, and my friend and colleague Dr. Pancoast has also devoted much time to the application of the art to different deformities, and by his success deserves our thanks. Dr. Post of New York, has recently published a case of blepheroplastic operation, and a surgeon of Trenton, one of rhinoplastic, and these I believe are all the operations of the kind as yet made known; there is no question however, but that others have been performed, and the science may be considered as fairly entrusted to our hands. As some may still doubt the possibility of making a "decent nose," I beg leave to refer to the unique specimen before you taken from a patient of Dr. Pancoast's, and I hope to have the pleasure of showing you the operation in a few days on a person now preparing for it, and thus demonstrate its practicability.

You are probably aware, that for sometime past I have been much occupied in the investigation of the various re-

medies for what are called "deformities." Among these, not the least important is the division of tendons, fascia, or muscles, when these organs are in fault. Like all new or novel measures this has met with its enemies as well as its advocates, and even now, although submitted to the test of several years experiment we find a difference of opinion relative to its merits. Entering upon the discussion of the question with no feelings of partisanship, and with every disposition to treat with deference the objections of those who may differ with me, I trust that my remarks will be attributed to no other motive than the desire of inculcating correct information as to the estimation in which the measure is at the present time generally held.

The term *tenotomy* has been applied to the division of tendons; that of *myotomy* to the section of muscles; while a similar operation upon fascia is called *aponeurotomy*. Inasmuch as all these operations, as now performed, are subcutaneous, Sedillot proposes the introduction of a generic term deduced from this circumstance, and he suggests the word *Hypodermatomy*, which signifies literally a subcutaneous operation; if generally adopted, this would probably answer better than any other.

This class of operations may with truth be considered as modern, for the isolated cases of tendon-cutting reported by Minius in 1685; by Jæger in the seventeenth century, and by Meckran, Roonhuysen, (see Heister,) Blasius, Tenhaaf, (see Chelius,) and Cheselden, were in reality mere attempts, and cannot be considered as having influenced in any way the introduction of these operations into general practice. The same may be said of those of Laurentz, published in 1789 by Thilenius, (who, by the way, is receiving the credit of originating this surgical novelty, and in honour of whom it is sometimes called the "*Thilenian operation*,") of Sartorius, reported in 1806, of Michaelis, performed in 1811, and even of that unfortunate case of

Delpech, an account of which was published in 1816. It was not, in truth, until the year 1833, when the extraordinary success of that most accomplished surgeon, Stroymeyer, of Hanover, directed in earnest the attention of the profession to the subject, that hypodermatomy can be said to have fairly arisen. Since this period almost every surgeon at home and abroad has performed it; and in proportion to his success, do we find him its advocate or its enemy. So far as this country is concerned, Dr. Dickson of New York was the first to perform the operation for club-foot, but it was not until the publications of Dr. Detmold of New York, and myself, that the question came fairly before the American profession. To Dr. Detmold is due the merit of the first tangible information on the subject.

The peculiar deformities for the relief of which hypodermatomy has been performed, are *club-foot*, *contracted joints*, *old luxations*, *fractures* of the *patella* and *olecranon*, followed by *permanent separation of the fragments* —some forms of *torticollis*, *strabismus*, *facial palsy*, *rigid jaw*, and the *contractions of the facia of the hand and foot*, so well described by Dupuytren. Time will not permit me to do much more than mention under this head, the cases for which the operation in question is designed; but some of these are at this moment attracting so much attention, that I deem it my duty to state my own views in relation to their value; others have already been alluded to.

The most striking, and probably the most interesting of these operations, from the controversy to which it has given rise, is that for *Strabismus*.

As is ever the case with any supposed novelty, several have laid claim to the origination of this; but, alas! we find the merit due to an itinerant quack, who flourished in 1738, and who, in a pamphlet entitled *De Verâ Causà Strabismi*, gave an account of this very measure. The

operation was also alluded to only to be condemned, however, by Heuerman, a German surgeon, in 1756. Mr. White, of London, several years since certainly demonstrated its practicability by performing it on the lower order of animals; and Dr. Ingalls, of Boston, it is stated by Mr. Atwell, proposed such a measure in his own case in the year 1812.—(*Medical Examiner*, 1842.)

Stroymeyer also suggested something of the kind, but Deiffenbach, of Berlin, more than any one else, deserves the credit of having successfully performed it on the human subject in 1839. Since this period it has been attempted by almost every one, and I think I may with safety assert, that no surgical measure of modern times has been more shamefully abused. Reports upon reports have been circulated by men calling themselves surgeons, but who, in many instances, have turned out the veriest quacks, in which it has been declared that in *every* case success attended the operation. Such assertions, known to be false, have induced the profession generally to receive "cum grano salis," the statements of all who have written upon the subject. Notwithstanding all that has been said and done to discredit it, however, I have no hesitation in declaring, that when properly performed, and the case carefully selected, (for there are many altogether unfit for the operation,) it richly deserves being ranked among the modern improvements in our art.

But its merit is still an open question, notwithstanding, and I advise you to enter upon its investigation fully impressed with the fact, that it will often fail entirely in affording relief, and not unfrequently give rise to deformity almost as great as that for which it has been performed. Two modes of operating are at present in vogue. 1st. The ordinary method by dissection, of which there are almost as many modifications as operators: and, 2d. The subconjunctival operation, in which the conjunctiva is barely

punctured. For my own part, I vastly prefer the former, for reasons which will be given in another place.

Nothing is more characteristic of the present want of success in the operation for strabismus than the numerous methods proposed to remedy the defects which are developed by its performance. The peculiar staring appearance occasioned by the abnormal prominence of the eye-ball has given much trouble, and we find almost every *strabotomist!* proposing some measure for its relief.

Rognetta, Guerin, Baudens and others, have "stitched the inner angle of the lower lid to the corresponding point of the upper one, the operator having previously removed with the curved scissors a crescentic fold of the integuments." So bungling an operation scarcely deserves mention, and besides it in reality increases the deformity, for while it does not diminish the projection of the ball it establishes an epicanthus as disfiguring as the original deformity.

Cunier proposes instead of this plan, to excise a vertical fold of the mucous membrane between the cicatrix and the caruncula, and then to bring the edges of the wound together and maintain them in apposition by one or two stitches. "The loss of substance in the conjunctiva and the fibrous membrane, induces a shortning and a closer adhesion of them with the ball so that this will no longer retain its abnormal prominence, and at the same time the caruncula which may have been more or less displaced, regains its natural situation."

Different plans have been proposed by Dieffenbach and others, but it is hardly necessary to enter into their description.

A recent "resumé" of the cases in which the operation for strabismus has been performed, is highly unfavourable to the general utility of the measure; not more than *half* the persons who submitted to it being relieved. It is more than probable, however, that many of these cases were totally

unfit for the experiment, and hence we should be careful how we receive as correct the statements there given. You will find this paper in a recent number of the Medical Examiner, and it is well worth your perusal.

I wish that I could say anything in favour of another new operation, of this class; I allude to the division of the muscles of the tongue in cases of stammering. It appears that this, like almost every other operation in surgery, was known to the ancients, that is, if the "researches" of M. Jobert are to be relied on. According to him, Galen, Ætius, and Paulus Egineta, not only understood the nature of the defect, but also that they performed an operation very similar to the one considered a "modern discovery," for its relief. It is very certain that in all these writers we find a good deal relative to the treatment of the *mogilali* or *stammerers*.

Several centuries elapsed after the time of these authorities before the attention of the profession seemed to be directed again to the subject, and it was not indeed until the beginning of the fifteenth, when F. Hildanus undertook to cure the stammerer by *an operation* that we find the matter referred to. In 1672, Dionis proposed something of the same kind, but it was not in reality until Dieffenbach in 1841 made public his cases, that modern surgery gave the defect the slightest consideration, and to him, therefore, is due the merit, if merit there be, of resuscitating a measure long since forgotten.

He proposes three plans of operating. In the *first*, he divides the root of the tongue *transversly*, the incision extending through nearly its whole thickness. In the *second*, he divides the root of the tongue in the same direction, but leaves the mucous membrane uncut except at the point through which the knife is past. In the *third*, he makes a transverse section of the root of the tongue, and then excises a triangular piece throughout its whole breadth and thick

ness, and this process he prefers to either of the others. That any surgeon of acknowledged ability should propose an operation so unphilosophical, so cruel, and so dangerous, naturally excites our surprise; but this feeling is converted into one near akin to indignation when we learn that he recommends it, after its repeated application had failed to afford relief, and even after it had been followed by fatal results. It has not I believe been attempted by any American surgeon and I trust it never will be.

Other operations in which the frænum linguæ, and the genio-hyo-glossi muscles are divided, have been introduced by Amussat, Baudens, Velpeau and others, for the relief of stammering, and each operator has a method of operating peculiar to himself. It matters very little, however, how the operation is performed, inasmuch as it is almost uniformly attended by failure. That it has occasionally been productive of benefit there cannot be a doubt, but in every successful case the patient had laboured under positive "tongue-tye," a defect easily recognised and for which the remedy is well known. But that it ever cured a case of purely functional stammering, unaccompanied by defective organization of the tongue as some would have us believe, it would be difficult to prove. Compared with the operation of Dieffenbach, it has the merit of being much less painful, less dangerous, and sometimes successful.

Dr. Detmold of New York, has proposed *acupuncture* in those cases of stammering in which the tongue is well-formed, and the measure has been frequently put into practice by Mott and others. So far, additional experiment is required to ascertain its utility; but for my own part I can only say that in all my cases it has been productive of no benefit whatever.

Myotomy has likewise been employed in cases of rigidity of the masseter muscle, and here with decided effect. In the American Journal of Medical Sciences for 1839, you will find the details of a case of locked jaw of some years stand-

ing, for the relief of which I divided this muscle and with perfect success. In the same Journal there is another case reported by Professor Furgurson, and recently others have been published by Dr. Smythe, in all of which the cure is attributed to this operation.

Torticollis or wry-neck is another deformity for which myotomy has frequently been performed. Indeed it is more than probable that in the time of Hippocrates the utility of the operation here was clearly recognised, and we know that it was performed long before the general application of either myotomy or tenotomy in modern times.

A very ingenious application of the principle under discussion has recently been proposed by that most inventive of all surgeons Dieffenbach, who seems never to rest satisfied with what has already been done in any department of our art. Struck with the inutility of the usual methods employed for the cure of that distressing defect, facial hemiplegia, he conceived the idea of curing by some surgical operation the deformity to which it gives rise. His first operation consisted in "the excision of an elliptical portion from the paralyzed cheek, the long diameter of the ellipse being parallel to the perpendicular diameter of the face, and then uniting the edges of the wound by suture." The experiment was partially successful, the wound healed in a few days, and the affected cheek shortened by the loss of its substance, was rendered sufficiently strong to antagonise to a certain extent the muscles of the opposite side, "though the actions of speaking, eating and laughing, were sufficient to destroy the equilibrium!" Although the benefit derived from this operation was decided, yet it was not deemed sufficient to warrant its repetition, and Dieffenhach from numerous experiments having discovered that "by the loss of their natural antagonists, healthy muscles are wont to become more firm and contracted," was led to draw an analogy between the consequences of the present affection and the contraction

of muscles in certain cases of club-foot which takes place at the expense of their paralysed opponents. From this analogy the idea of a similar operation suggested itself, and the success which attended its execution justified his anticipation of its utility. The operation consists in dividing the muscles of the sound cheek, at least all concerned in the defect, by means of a small knife, passed directly under the skin and introduced through a small puncture. Two incisions, one through the muscles of the upper portion of the cheek, and the other through those of the lower part of the jaw, are generally required. The punctures are dressed with a little adhesive plaster, and the parts kept at rest by the dressing for fracture of the lower jaw.

This operation is comparatively slight, the pain, hemorrhage, and subsequent inflamation rarely amounting to any thing of importance, and three or four days are sufficient to complete a cure. In one case of Dieffenbach's, however, erysipelas and suppuration of the wound occurred, and the patient was under treatment for several months; nor does it invariably succeed. While, then, I consider this a beautiful, most ingenious, usually safe, and sometimes successful operation, one that from authority you are justified in performing, I would have you bear in mind the possibility of its proving of no avail to your patient, a fact of which you should always advertise him.

Division of the muscles has also been employed to correct the distortions of the spinal column, and in spite of its want of success the origination of the measure has been claimed by several. It is a matter of little importance to whom the merit belongs, but Guérin of Paris, has generally received it. He is certainly its most ardent advocate, and has unquestionably put it into execution more frequently than all the surgeons of Europe and this country combined.—Guérin's theory is simply this:—according to him "all spinal distortions should be classed with club-foot, wry-neck, contracted knee, &c., and as the muscles of the foot, leg, or

knee, by their contractions produce certain deformities, which arising from the same cause, perverted muscular action, present the same general character, and require for their relief the same operation, division of the contracted muscles; so also curvature of the spine may be considered as the club-foot of the back, depending on the contracted state of the muscles of this region and requiring for its cure their division"! Time will not permit me to enter upon the discussion of the arguments in favor of and against this operation, but I agree entirely with Bouvier in the opinion that it is still "auceps remedium," and rarely if ever productive of the slightest benefit. Guérin on the other hand declares it to be a safe, easy, and almost certain means of affording relief. Time and future observation must decide the question; for my own part I have no confidence in it whatever.

The application of myotomy in old luxations and fractures, has already been alluded to.

In a certain form of spasm of the muscles of the thumb, produced by excessive exertion of these muscles in writing, myotomy has also been resorted to, but the cases reported are too few and too hastily drawn up for us to say whether the measure is to be relied on or not. From the fact that the disease is confined to those who like scriveners write a great deal, it has been called "scriveners' spasm."

In no deformities has hypodermatomy been performed more frequently than in club-foot, and contracted limbs. It will be impossible for me to do more than contrast its merits with those of the *mechanical treatment*, as it is called, in the management of these cases.

It has been well said by a recent writer, Dr. I. Parrish, "that much of the evidence on both sides of the question lacks that certainty and philosophical accuracy which should distinguish medical testimony." (Retrospective Address on Surgery—Transactions of the College of Physicians, Philadelphia, 1842.) And why is this? It originates gentlemen in the crying sin of the age, one already alluded to, the *desire* of being known as a discoverer, or at least an apt follower!

The advocates of both plans of treatment have been too eager to publish their cases, and too prejudiced as a general rule to listen to the arguments or the facts of the opposite side. Many also, totally unfit for observations of any kind have attempted to solve the difficulty, and hence have only made "confusion worse confounded!" The great error here as in almost every thing else, consists in exclusiveism. No surgeon who has studied the subject will think for an instant of separating the two plans; they are so closely connected that they must ever be considered as "bone of one bone and flesh of one flesh." But much remains for us to accomplish in the effort to establish a correct code of rules by which surgeons are to be governed. The indications under which tenotomy is required, and those which point out the employment of mechanical measures alone, the *when* and the *where*, have not as yet been fully explained. Time, and further careful unprejudiced observations, are required to place each method in its true position, and I trust that to some one among you is reserved the honour of solving this difficult and most interesting question. But in the present state of our knowledge to discard either, to confine ourselves to one mode of treatment alone, would be in truth a casting away of the gem because *we* are ignorant of its value. It is much to be regretted that the *dangers* of tenotomy have been so much magnified, for in truth if properly performed it is accompanied by none. I cannot do better, however, to convince you of the position it holds abroad among those who have given it a fair trial, than to quote the following extract from the excellent retrospective address of Mr. Dodd.

"The relief," he observes, "of contracted joints by the division of tendons, is now finally fixed upon the basis of an extensive experience, and the fears formerly entertained for the injury of the tendons entirely dismissed!" Again he remarks—"It is seldom that an axiom shall be struck out in practice of so simple a nature, and of so general application. The fears which used to be entertained of injuring tendons, and which, till very lately, entirely regulated this branch of

surgical practice, having by the successful issue of one part of the inquiry been dispelled, we now find scope for the application of the principle to an extent that its first promoters never dreamed of, and from the progress which has recently been made in the relief of deformities by this means, it is difficult to predicate the limits of its application. Already has it been brought to bear on all the principal joints, the spine, the neck, and the eye. It is gratifying at all times to witness the accomplishment of an important and palpable relief to human suffering, and in this as in every other case, the amount of our admiration is much proportioned to the simplicity of the means, contrasted with the magnitude of the result."

Nor, gentlemen, is this the opinion of one individual alone; almost every surgeon in Europe and many of those at home, while they caution us against unnecessary and too frequent operation, yet state *distinctly* and *positively* that *tenotomy* is, and should be considered the least painful, least dangerous, and most useful, of all our means for the relief of deformities of various kinds. The most eminent authorities who at this time are advocates of the operation, are Stroymeyer, Dieffenbach, Scouttetin, Franz, Graefe, Von Ammon, Guérin, Bouvier, Velpeau, Roux, Duval, Liston, Brodie, Syme, Whipple, Little, Cooper, and Baird. The late Sir A. Cooper, and Sir C. Bell were both its supporters. In our own country many of our best surgeons have given it their decided sanction, and that such will be the case with all who candidly and without prejudice give the operation their attention, I verily believe. But while you find in me a firm, uncompromising advocate of hypodermatomy, you must not suppose that I advise its employment in all cases, or with the recklessness of some who hesitate not to operate on children *three* days old for squint, (Dieffenbach, British and Foreign Review, January, 1840,) or who divide the muscles of the spine in cases of long standing curvature, or who divide forty-two muscles in the course of twenty-four consecutive hours (Guérin), or who cut the tendons in

club-foot at birth, or who nearly cut out a man's tongue to make him speak plainer ! All this ardor operandi is to be condemned, unequivocally condemned. I contend for nothing of the kind, and caution you against giving way to the temptation. Before leaving the subject, I wish to refer you to some excellent strictures against this operation when unnecessarily performed, published by my friend Dr. R. Coates of this city, in the Medical Examiner for 1841. They exhibit great ingenuity on the part of their author, and morever will serve in most cases as correct guides for your practice.

A very ingenious modification of tenotomy has been proposed by Stroymeyer, to be employed in cases of paralysis of the different muscles of the body, but especially in those of the leg. It consists in *cutting out* a piece of the elongated tendon, and then uniting the divided extremities at once. It is obvious that by such an operation we shorten the organ and hence stimulate the muscles to healthy action, and enable them to a certain extent to perform their natural office. This operation has been performed by Dr. Blackman of New York, and in two cases by myself and with decided benefit in all.

No complaint more truly deserves the attention and sympathy of the surgeon, than procidentia uteri. Painful in the extreme and often incurable, it is not surprising that so many attempts should, from time to time, have been made for its relief. I can only allude, however, to those of recent introduction—the most successful of which are such as have for their object, either the diminution of the calibre of the vagina at its middle or upper portion, or the occlusion of its orifice, so as to prevent the escape of the womb beyond that point. Hall and Phillips of London; Ireland and Kennedy of Dublin; Dieffenback of Berlin; Fricke of Hamburg; Laugier, Velpeau and Jobert of Paris; and Geddings of this country, have probably paid more attention to the subject than any other modern surgeons, and to their papers descriptive of the different operations performed, I must refer you for all requisite information.

Many attempts have recently been made to relieve that most disgusting of all defects vesico-vaginal fistula. No affection is more difficult from a variety of causes to cure, and hence operation upon operation has been devised. I shall call your attention to only one or two. When the fistula is small it may in some cases be healed by the cautery or suture, and sometimes the cure is spontaneous. The little reliance to be placed upon either of these plans induced me some time since to employ a different method. The edges of the wound being *callous* and our chief object in the treatment being to cause the callous edges to granulate, I have tried along with caustic the following plan: Take a double silver catheter of large size and the usual length and curve of the female catheter. On the *convexity* of the instrument and at a point corresponding with the fistulous opening in the septum let there be an orifice large enough to admit the passage of a skein of cotton thread, and connecting with the lower chamber of the catheter. The instrument is to be introduced into the bladder and then a flexible stilet armed with the skein of thread is passed along its lower chamber until it reaches the opening opposite the fistula. As this chamber ceases at the opening, the point of the stilet passes out at once, and then through the fistula into the vagina. The surgeon then seizes it and drawing it out of the os externum, lodges the skein of thread to which it is attached in the fistula. The catheter is then fixed in the urethra by the usual bandage and the ends of the skein tied to each other. When properly applied it is obvious that no urine can escape by the fistula, the whole of this fluid passing out by the upper chamber of the instrument, and also that the irritation of the thread will cause a swelling and granulation of the opening. Every day the orifice is touched with lunar caustic and one thread of the skein drawn out, until at length the whole has been removed. In two cases out of five this plan succeeded perfectly.

When the fistula is large, Leroy d'Etiolles proposes to

raise up the posterior wall of the vagina and apply it over the opening. The operation is difficult, and can only be performed when the fistula occupies the middle of the vesico-vaginal septum, and is therefore applicable to but few cases; when practicable it seems to promise much more than the plastic operation of Jobert in which a long flap is taken from the thigh, rolled into a cylinder and then thrust into the fistula—to the margins of which it is attached by sutures. The arched flap proposed by Velpeau is also an operation hardly to be relied on, although like every thing emanating from this source it deserves our attention.

A most terrible case of recto-vaginal fistula has recently been cured by a most ingenious and difficult operation invented and executed by my friend Dr. J. R. Barton. The details of this operation are too voluminous to admit of their introduction here; but I wish you all to refer to the case, which you will find in a late No. of the American Journal of Medical Sciences, inasmuch as the credit of the invention has in a most unaccountable manner, been given by Guérin of Paris, to Dr. Mott of New York.

In this rapid and hasty sketch of a portion of what has occupied the time and talents of our brethren for some years past, it must have been obvious to you that American surgeons have been no laggards in the mighty race for professional fame. That they as well as their collaborators in Europe, have been steadily engaged in adding each a stone to the pyramid of modern surgery! The flame which burns so brilliantly abroad has thrown its rays across the wide Atlantic, and soon its genial warmth will be felt from one extremity of our country to the other. Shall it be permitted to subside? Will you who are destined to be the pillars upon which the medical science of this country is to rest, fail to add fuel to this flame? Will you by slothful indulgence, wasteful sensual gratification, ignoble and puny contentedness which readily *receives* but never *gives*, let pass this golden era? Will you not rather "gird up your loins"

to the toil—and by your diligence, morality, and laudable ambition, wreathe a new chaplet of glory for the land of liberty and equal rights? Show to the world that if in politics, religious tolerance, and social virtue, America once stood and will stand again, the foremost of nations, she may also boast of her medical science.

Recollect that you are destined to sustain the honours and prolong the glories of a science that has long been dignified and adorned by the profound attainments, the elevated integrity, the high bred courtesy of a Hunter, a Cooper, a Bell, a Paré, a Dupuytren, and a Physick!—What an inspiring example! What an animating incentive! How proud your obligation! With those lights to guide you in the path to excellence, hasten to prove yourselves worthy of receiving the bright mantle of fame with which a grateful world has always been ready to clothe him who with tenderness and love ministers to the pangs and sorrows of his fellow man.

There are many among you who are discouraged from entering with ardor upon the pursuit of the profession, from the supposition that nothing or next to nothing remains for them to discover. Let no such idea take possession of your minds; ours as I have already told you is a progressive science and far very far from perfection. Mirabeau has justly remarked "that to suppose every thing in any science to be discovered, is like taking the horizon for the limits of our earth!" Fully impressed with this fact, let me urge upon you constant, patient, unprejudiced investigation. The harvest is rich and he who boldly thrusts in his sickle will assuredly reap an abundant reward. It is true that "generation after generation will probably pass away ere a final victory over the chaos and confusion which still reigns over us can be accomplished, but the day will come when our descendants, like the discoverers of old at the pillars of Hercules, may pause and say—"

"Hic tandem stitimus, nobis ubi deficit orbis!"

Dwell not then upon what has been done but what remains to do.

Another influence well calculated to dampen your energies is the success of quackery. The dark clouds of ignorance, and error, and presumption do indeed gather more and more around and above us, and often the true votaries of our noble art are bowed down with dispair. It comes not within my province to discuss the causes of this increase of the evil, but there is surely none more efficient than the facility with which a medical degree is usually obtained, and consequently the little value set upon its possession by the community at large. I trust, however, that a better state of things will sooner or later arise, and in the mean time should any among you be disheartened, let him not look to the boasted success of the lying and impudent quack, but to the brilliant examples of wisdom, and intellect, and honesty with which our profession is replete. In whatever direction we turn, the trophies of these great men are before us, and pointing to them, gentlemen, I would appeal to you in the language of Demosthenes when pleading in behalf of the Rhodians, he invoked the memory of the illustrious dead and pointed to the monuments of their valour to rouse their sons to the same noble achievements; "think," says he, "that your ancestors erected these trophies not that the view might barely strike you with admiration, but that *you* might imitate the virtues of the men who raised them!" Allow not then the temptings of the demon of avarice to lead you astray—the gains of the mercenary and hard hearted empiric though often alluring to the poor and diligent, but honest and honorable votary of his art, can in the end be productive of no comfort, no satisfaction. I envy not the man whose highest pinnacle of prcfessional eminence is based upon money, whost loftiest aspirations are bounded by an horizon of gold. Alas! he knows not the charm that envelopes and hallows the charitable act; he feels not the genial wamth which springs from the poor man's blessing; he cares not for the tears of the orphan and

widow; he thinks of and values only, the means by which he may heap up the poor, fleeting, perishable wealth of this world, and with every generous feeling callous, with every kindly sympathy locked up in his frigid heart, he moves in the crowd not as a dispenser of health and comfort to the sick and needy; not as the cherished friend of every homestead; not as the harbinger at whose approach the pangs of death even, are subdued; but rather as the harpy who preys upon the very vitals of his patient. Oh then, gentlemen, cherish the kindly feeling of our nature—degrade not by sordid motives that magnificent vocation, that noble and admirable mission which shrinks from no devotion and distributes its success impartially to the crowned head and to the poor beggar—and in conclusion let me remind you in the glowing stanzas of a native bard, that,

"Art is long and time is fleeting,
And our hearts though stout and brave,
Still like muffled drums are beating
Funeral marches to the grave!

Let us then be up and doing,
With a heart for any fate;
Still achieving, still pursuing,
Learn to labour and to wait."

LONGFELLOW.